	Application No.	Applicant(s)
Notice of Allowability	10/632,736	MELNIK ET AL.
	Examiner	Art Unit
	Karla Maara	1762
	Karla Moore	1763
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in the or other appropriate communi GHTS. This application is sub-	nis application. If not included cation will be mailed in due course. THIS
1. $\square$ This communication is responsive to $9/11/06$ .		
2.  The allowed claim(s) is/are <u>1-15,17,18 and 20-31</u> .		
3. Acknowledgment is made of a claim for foreign priority un	nder 35 U.S.C. § 119(a)-(d) or	<b>(f)</b> .
a) All b) Some* c) None of the:		•
<ol> <li>Certified copies of the priority documents have</li> </ol>	been received.	
<ol><li>Certified copies of the priority documents have</li></ol>	been received in Application	No
3.  Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be subministration (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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August 11 11 11 11 11 11 11 11 11 11 11 11 11		
Attachment(s)  1. Notice of References Cited (PTO-892)	5  Notice of Infor	rmal Patent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Sum	• •
3. ⊠ Information Disclosure Statements (PTO/SB/08),	Paper No./Ma	ail Date mendment/Comment
Paper No./Mail Date 0906		
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material		atement of Reasons for Allowance
·	9.	
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Application/Control Number: 10/632,736

Art Unit: 1763

## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 1-15, 17-18 and 20-31 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach or fairly suggest a reactor capable of extended growth of a gallium containing single crystal as claimed and specifically comprising: an extended material (e.g. gallium) source partially inside and partially outside of the reactor tube and within a multi-zone material (e.g. gallium) source zone, said extended material source having a length so that different portions of said extended material source are capable of being maintained at different temperatures, said extended material source being controllably positionable so that said multi-zone heater is capable of maintaining a first portion of said extended material source at a first temperature while simultaneously maintaining a second portion of said extended material source at a second temperature. Further, no other piece of prior art was located that provided the missing teaching(s) along with the requisite motivation for combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1763

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KARLA MOORE
PRIMARY EXAMINER

Art Unit 1763 13 November 2006